# **Nuclear Material Stabilization** and Disposition (RL-0011)

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First load of waste transported to ERDF





Cell D6

#### **Overview**

This section addresses work in Project Baseline Summary RL-0011, Nuclear Material Stabilization and Disposition.

NOTE: Unless otherwise noted, all information contained herein is as of the end of August 2005.

## **Notable Accomplishments**

#### Disposition the Plutonium Finishing Plant (PFP) Facility

**Waste Management:** Shipped 53 solution containers to Waste Management since the beginning of August, bringing total shipped to date to 182.

First load of waste transported to the Environmental Restoration Disposal Facility (ERDF). The roll-off box carried on the truck bed contained the PFP water tower, which was torn down in April 2005.

- 234-5: Six gloveboxes and hoods decontaminated to Low Level Waste (LLW) or removed, bringing the total to 44.
- **232-Z**: Completed shipment of process glovebox to T-Plant for future disposition.
- **241-Z:** Completed characterization phase of the 241-Z decommissioning, including the first entry in over 15 years into Cell D6.

#### **Disposition Special Nuclear Material (SNM)**

Fuels: Completed receipt of the first 12 Ident-69s.

## FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
Nuclear Materials Stabilization & Disposition	\$ 197.6	\$ 182.1	\$ 15.5

## FY 2005 Schedule/Cost Performance (\$M)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Nuclear Materials Stabilization & Disposition	\$175.4	\$156.5	\$159.6	-\$18.9	-10.8%	-\$3.1	-2.0%	\$204.9

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

### FY 2005 Schedule/Cost Performance, continued

Schedule Performance (-\$18.9/-10.8%): Primary contributors to the unfavorable schedule performance include:

- Delays in SNM de-inventory; the new Department of Energy direction on path forward has not yet been implemented in the baseline.
- Delays in 234-5Z process equipment removal due to delayed clearances, follow-on training requirements, and a significant amount of work delayed beyond FY 2005.
- 232-Z glovebox Deactivation and Decommissioning (D&D) impacted by higher-than-anticipated volume of loose debris, requirements for process equipment removal, and decontamination of the incinerator glovebox.
- Design and constructability issues supporting pencil tank removal work and lack of cleared staff to support rooms 50 and 60 process equipment removal in the Plutonium Reclamation Facility.
- Delays in solid waste disposal activities and apportioned D&D project management due to overall delayed D&D activities.

The above negative schedule variances are partially offset by:

Recovery of prior-year legacy hold-up removal and lab support activities.

**Cost Performance (-\$3.1M/-2.0%)**: Primary contributors to the unfavorable cost variance include:

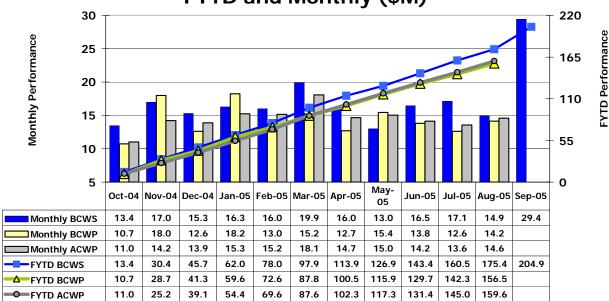
- Increased costs in 232-Z D&D work to support technical issue resolution and subsequent recovery actions; unplanned costs for 291-Z and scrubber cell work.
- Increased costs in pencil tank removal system.
- Increased Regulatory Compliance support, and increased labor effort to complete waste storage and other facility modifications supporting D&D.
- Increased costs for occupancy, dosimetry, and severance costs, coupled with work planning initiatives.
- Unplanned costs for the Breathing Air Compressor Project.
- Higher-than-expected water tower demolition costs.

The above negative cost variances are partially offset by:

- Reduced solid waste disposal costs; efficiencies gained by using existing lab and SNM de-inventory teams to accelerate 234-5Z process equipment removal.
- Efficiencies in: (1) 242-Z entry planning, (2) Min-Safe Operations and Surveillance, and (3) Closure Services work.

# FY 2005 Schedule/Cost Performance, continued





# **Milestone Achievement**

Number	Milestone Title	Туре	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-05-501 TRP-05-506	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA PI	6/30/05	12/8/04		Complete
TRP-05-504	Remove and Disposition Pu Holdup in Process Equipment at PFP	PI	9/30/05	6/30/05		Complete
TRP-05-505	Transition 10 Facilities to Slab-on- Grade	PI	9/30/05	5/22/05		Complete
TRP-06-500	Decontaminate Glovebox HA-20MB	PI	3/31/06	10/28/04		Complete
TRP-06-501	Complete 100% Legacy Pu Holdup Removal and Disposition	TPA	9/30/06	6/30/05		Complete
TRP-06-507 TRP-06-502	Transition 232-Z Bldg Incinerator to Slab-on-Grade	PI TPA	3/31/06 9/30/06		4/30/06	Behind Schedule Ahead of Schedule
TRP-06-509	Disposition Miscellaneous PFP Nuclear Materials	PI	9/30/06		9/30/06	On Schedule
TRP-06-511	Remove or Decontaminate 236-Z Pencil Tanks	PI	9/30/06		9/30/06	On Schedule
TRP-06-512	Remove or Decontaminate the 236-Z Process Equipment in Rooms 50 & 60	PI	9/30/06		9/30/06	On Schedule
TRP-06-513	Remove or Decontaminate the Remaining 236-Z Process Equipment	PI	9/30/06		9/30/06	On Schedule
TRP-06-514	Remove or Decontaminate 113 Gloveboxes and Hoods in 234-5Z	PI	9/30/06		9/30/06	On Schedule
TRP-06-515	Complete 242-Z Initial Entry & Characterization	PI	9/30/06		9/30/05	Ahead of Schedule
TRP-06-517	Dispose of Approximately 600 Pu Nitrate Containers at PFP	PI	9/30/06		9/30/06	On Schedule